

Title (en)
Locking device

Title (de)
Verschlussvorrichtung

Title (fr)
Dispositif de fermeture

Publication
EP 2365234 A1 20110914 (DE)

Application
EP 11001785 A 20110303

Priority
DE 102010011075 A 20100311

Abstract (en)
The closure device comprises a closure flap (6), which is hinged by a hinge arranged at an outer-side of an opening, and an operating unit arranged at the hinge for opening and closing the closure flap, where the operating unit has a helical gear that is formed as a spindle drive. A longitudinal axis of a threaded spindle (28) of the spindle drive coincides with a pivot axis of the hinge. A spindle nut (26) of the spindle drive is fixed at a hinge suspension connected with the closure flap. The closure device has an interlocking unit for preventing a rotation of the threaded spindle. The closure device comprises a closure flap (6), which is hinged by a hinge arranged at an outer-side of an opening, and an operating unit arranged at the hinge for opening and closing the closure flap, where the operating unit has a helical gear that is formed as a spindle drive. A longitudinal axis of a threaded spindle (28) of the spindle drive coincides with a pivot axis of the hinge. A spindle nut (26) of the spindle drive is fixed at a hinge suspension connected with the closure flap. The closure device has an interlocking unit for preventing a rotation of the threaded spindle. The spindle drive has a second spindle nut, at which a reception is formed for an operating lever (8). The interlocking unit is provided for preventing a linear movement of the second spindle nut. The both spindle nuts have different thread pitches.

Abstract (de)
Eine Verschlussvorrichtung weist eine Verschlussklappe (6) auf, die an mindestens einem außenseitig einer Öffnung angeordneten Scharnier (10) angelenkt ist. An dem Scharnier (10) sind Betätigungsmittel zum Öffnen und Verschließen der Verschlussklappe (6) angeordnet, die ein Schraubgetriebe beinhalten.

IPC 8 full level
B01J 3/03 (2006.01); **B63G 8/00** (2006.01); **B63G 8/40** (2006.01); **F16J 13/18** (2006.01)

CPC (source: EP KR)
B01J 3/03 (2013.01 - EP); **B63B 19/14** (2013.01 - KR); **B63G 8/00** (2013.01 - KR); **E05F 15/611** (2015.01 - KR); **F16J 13/16** (2013.01 - KR); **F16J 13/18** (2013.01 - EP); **B63B 19/12** (2013.01 - EP); **F16H 25/20** (2013.01 - EP)

Citation (search report)
• [X] GB 391886 A 19330511 - JOHN CAMPBELL
• [X] GB 328352 A 19300501 - WILLIAM JAMES LOVETT
• [A] US 6253632 B1 20010703 - POULEK VLADISLAV [CS]
• [A] GB 857203 A 19601229 - MARCONI WIRELESS TELEGRAPH CO

Cited by
CN102926636A; CN106285282A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2365234 A1 20110914; **EP 2365234 B1 20150617**; DE 102010011075 A1 20110915; DE 102010011075 B4 20120405; ES 2545983 T3 20150917; KR 101362098 B1 20140212; KR 20110102836 A 20110919; PL 2365234 T3 20151231

DOCDB simple family (application)
EP 11001785 A 20110303; DE 102010011075 A 20100311; ES 11001785 T 20110303; KR 20110021468 A 20110310; PL 11001785 T 20110303